

# DUSP18, human recombinant

<b>CATALOG #:</b>	7815-50	50 µg
<b>ALTERNATE NAMES:</b>	Dual specificity protein phosphatase 18, DUSP20	
<b>SOURCE:</b>	E. Coli	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	40.4 kDa (359 aa, 149-482 aa + His Tag)	
<b>FORM:</b>	Liquid	
<b>FORMULATION:</b>	0.5 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.1 mM PMSF, 1 mM EDTA and 1 mM DTT	

**STORAGE CONDITIONS:**

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**DESCRIPTION:**

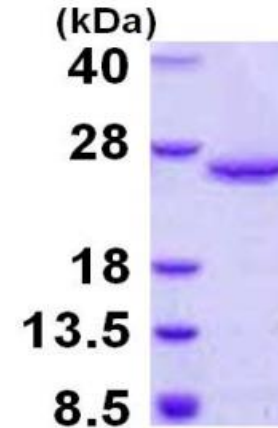
Dual specificity phosphatase 18, also known as DuSP18, is a member of the dual-specificity phosphatase (DSP) family, which catalyzes dephosphorylation of phosphotyrosine and phosphothreonine residues. DuSP18 is inhibited by iodoacetate and is activated by manganese ions. Along with having preferential enzymatic activity against phosphorylated tyrosine residues over threonine residues, DuSP18 also dephosphorylates p-nitrophenyl phosphate (pNPP) in vitro. This protein is widely expressed with highest levels in liver, brain, ovary and testis. Recombinant human DuSP18 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**AMINO ACID SEQUENCE:**

MGSSHHHHHH SSSLVPRGSH MGSMTAPSC AFPVQFRQPS VSGLSQITKS  
LYISNGVAAN NKLMSSNQI TMVINVSVEV VNTLYEDIQY MQVPVADSPN SRLCDDFDPI  
ADHIIHSEVMK QGRTLHCAA GVSRSALCL AYLMKYHAMS LLDHTWTKS CRPIIRPNSG  
FWEQLIHYEF QLFGKNTVHM VSSPVMIPD IYEKEVRLMI PL

**BIOLOGICAL ACTIVITY:**

Specific activity: >1,100 units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme hydrolyzing 1 nmole of p-nitrophenyl phosphate (pNPP) per minute at 37°C, pH 7.5 using 10 mM of substrate



15% SDS-PAGE (3µg)

Human Recombinant DUSP18

**RELATED PRODUCTS:**

- DUSP3, human recombinant (Cat. No. 6371-100)
- DUSP10, human recombinant (Cat. No. 7814-50)
- DUSP21, human recombinant (Cat. No. 7816-50)
- DUSP23, human recombinant (Cat. No. 7817-50)

**FOR RESEARCH USE ONLY! Not to be used in humans.**